Alternatives to State-Level Regulation of Forensic and Breath Alcohol Analysis

The law (Health and Safety Code §§100700-100775) authorizes the Department of Health Services (DHS) to promulgate and enforce regulations pertaining to forensic and breath alcohol analysis. There are no specific provisions in the law for any other oversight of this testing. During the first meeting of the review committee on August 25, 2005, several committee members made references to alternatives to state-level oversight of forensic and breath alcohol analysis. Included here were claims that the judicial process itself provides adequate oversight of forensic and breath alcohol analysis and that ASCLD/LAB accreditation is an adequate substitute for DHS oversight. In addition, several committee members suggested that there was really no need for any oversight of this testing at all, noting that none of the other crime lab testing is regulated.

The Department's forensic alcohol program is offering its perspective on these comments, beginning with the observation that alcohol analysis is the only regulated crime lab activity:

1. Why are forensic and breath alcohol analysis subject to DHS' regulations when other crime lab tests are not regulated?

The simplest answer to this question is that this regulation is required by specific statutes. Thus, while there are apparently no technical or scientific regulations covering other crime lab disciplines (trace evidence, controlled substances, firearms/toolmarks, questioned documents, latent prints, etc.), California, as well as virtually every other state, has enacted specific laws and regulations covering forensic and breath alcohol analysis. This is justified because of the scope and unique importance of this testing. California's 22 million drivers have automatically given their consent to chemical testing for the purpose of determining blood alcohol content. There are nearly 200,000 drunk driving arrests each year in California. Blood and breath alcohol analysis are certainly the most common tests performed by the crime labs and arguably the most important. Unlike most of the testing performed by the crime labs, which yields qualitative results, blood and breath alcohol analyses yield specific quantitative results. These test results directly support California's presumptive and illegal *per se* laws. In California, it is unlawful to drive with a blood alcohol concentration at or in excess of 0.08 grams% [Vehicle Code §23152(b)]. A blood alcohol concentration of 0.07 grams% would not violate this law. Because of such narrow tolerances, it is critical that the testing procedures used by law enforcement agencies are scientifically accurate and reliable.

California statues and regulations govern all aspects of the chemical testing of drunk drivers including the collection of samples, the methods of analysis, the qualifications of individuals performing the testing, the procedures for reporting results, and the maintenance of records. DHS is required under the law to enforce the law and regulations.

2. **The judicial process provides adequate regulation of forensic and breath alcohol analysis.**

Several committee members suggested that the court process itself, with the intense scrutiny of defense attorneys, prosecutors, and police agencies, provides a sort of de facto regulation of forensic and breath alcohol analysis, thus eliminating the need for any state oversight. As noted above the law doesn't completely support this point of view. Health and Safety Code §§100700-100775 exist for the expressed intent of ensuring the competence of the forensic alcohol laboratories and employees to prepare, analyze, and report the results of the tests and

comply with applicable laws. Moreover, there appear to be several reasons why the judicial process does not provide effective oversight of driving under the influence (DUI) testing. First, the majority of DUI cases (probably greater than 90%) never go to trial, they are pleaed out. Even when DUI cases are actually tried, the defense may stipulate on the chemical test evidence. In these cases, the scientific DUI evidence is not subjected to any scrutiny at all. In those cases where DUI evidence is challenged in court, opposing counsel (typically non-scientists) may lack the scientific knowledge to effectively evaluate the evidence. To some extent, this situation appears to be reflected in the statements made by the representatives for the prosecuting and defense attorneys on the review committee. Both representatives have noted that they may lack the competence to evaluate the technical and scientific impact of any proposed changes to the regulations.

Based on these factors, it does not appear that the judicial process alone provides effective oversight of the testing conducted in support of the State's drunk-driving laws

3. ASCLD/LAB's accreditation program provides effective oversight of forensic and breath alcohol analysis

There are two appropriate responses to this claim. First, it should be noted that there is absolutely no requirement under the new law that a forensic alcohol laboratory be ASCLD/LAB accredited. Currently, approximately a fourth of the labs in California performing analyses for law enforcement are not ASCLD/LAB accredited. (This includes five 5 public crime labs and 6 private labs). More importantly, as shown in the attached analysis, a careful examination of the ASCLD/LAB guidelines shows that they do not include any specific requirements for forensic alcohol analysis and don't even mention breath alcohol analysis. By contrast, California's current regulations set forth specific forensic alcohol standards of performance requirements covering accuracy and precision, non-interference from anticoagulants and preservatives added to the sample, and results obtained when subjects free of alcohol are tested. There are also standards of procedure covering sample collection and retention, chain of custody, method calibration requirements, inclusion of blanks, and the analysis of quality control samples. Finally, the Department's regulations include requirements for the maintenance of specific forensic alcohol records.

The Department's regulations also set standards of performance and procedure for breath alcohol analysis including: authorized procedures, use of approved instruments, requirements for training the operators of instruments, duplicate analysis of samples, required agreement of results, and procedures for checking the accuracy of the instruments.

Requirements of Title 17 of the California Code of Regulations and the American Society of Crime Laboratory Directors, Laboratory Accreditation Board Pertaining to Forensic and Breath Alcohol Analysis

	Title 17[1]	ASCLD/LAB[2]
Forensic Alcohol Analysis	There are specific standards of performance requirements covering accuracy and precision, non-interference from anticoagulants and preservatives added to the sample, and results obtained when subjects free of alcohol are tested. There are also standards of procedure covering method calibration requirements, inclusion of blanks, analysis of quality control samples, duplicate analysis of samples, maintenance of equipment. Each laboratory is required to file with the Department, detailed, up-to-date written descriptions of each method it uses for forensic alcohol analysis.	There are very general performance requirements (new technical procedures must be documented and scientifically validated), but there are no performance standards or procedure requirements specific to forensic alcohol analysis.
Breath Alcohol Analysis	There are standards of performance for breath alcohol analysis including: authorized procedures, approved instruments, requirements for training operators of instruments, duplicate analysis of samples, required agreement of results, and procedures for checking the accuracy of the instruments.	There are no requirements covering breath alcohol analysis.
Maintenance of Records	There are requirements for the maintenance of specific records of forensic alcohol activities (personnel records, training records, records of samples analyzed, quality control program, performances in proficiency tests) and breath alcohol analysis activities (determinations of accuracy of breath testing instruments, records of training of persons who operate breath testing instruments).	Laboratories are required to have written policies and procedures for handling and preserving evidence, but there are no requirements for the maintenance of specific forensic and breath alcohol analysis records.
Laboratory Proficiency Testing	Laboratories must participate in the Department's proficiency-testing program. Currently, the Department conducts proficiency tests three tines a year. Laboratories are sent one set of samples for each method in use. The results are used by the Department to evaluate the accuracy of the forensic alcohol analyses performed by the laboratory. Laboratories with unsatisfactory performances are required to provide written reports of the corrective action taken and experimental data demonstrating that the method meets the required standard of performance. Unsatisfactory performance in two out of four consecutive proficiency tests may result in the suspension or revocation of the laboratory's license.	A laboratory must annually participate in at least one external proficiency test for each forensic discipline in which it provides services. Each laboratory must have a written procedure which it uses to initiate a review and whenever applicable, take corrective action taken when proficiency test results are inconsistent with expected test results. An accredited laboratory's results are reviewed by a proficiency review committee. There are no specific sanctions for a failed proficiency test. ASCLD/LAB states that, "Depending on the nature, severity, and/or persistence of the problem, sanctions affecting the accreditation status may also be recommended."
Employee Qualifications	Laboratory staff are qualified at the trainee, analyst, or supervisor levels. Staff must meet minimal educational qualifications, including a course in quantitative analysis, complete an approved training program, pass a written examination, and demonstrate a satisfactory performance in a proficiency test in order to be approved by the Department to perform forensic alcohol analysis. Supervisors must have a baccalaureate or higher degree in chemistry, biochemistry, or other appropriate discipline as determined by the Department and must demonstrate satisfactory performance in a proficiency test and written examination.	Laboratory staff (Toxicology) must have a baccalaureate degree in a natural science, toxicology, or criminalistics and must, "understand instruments and, methods, and procedures used." Each "examiner" should be proficiency tested annually in each subdiscipline in which case work is performed, but this may be satisfied by an internal proficiency test. There is no requirement for staff to complete an external proficiency test or written exam.

	Title 17[1]	**ASCLD/LAB**[1]
Collection and Handling of Samples	Samples taken for forensic alcohol analysis and breath alcohol analysis must be collected and handled in a manner approved by the Department. There are specific procedural requirements for the collection of blood, breath, and urine samples. The identity and integrity of the samples must be maintained through collection to analysis, and reporting. There are requirements for making a sample available to a defendant on request.	Laboratories are required to have procedures for evidence handling and for maintaining integrity of the samples, but there are no specific sample collection requirements.
Site Inspections	Laboratories are subject to periodic on-site surveys by representatives of the Department, the results of which must meet the requirements of the regulations. The Department is authorized to enter a laboratory at all reasonable times to conduct such inspections. The site surveys are specific to the requirements of forensic and breath alcohol analysis.	Laboratories are site inspected once every 5 years. The site inspections are scheduled by mutual agreement between ASCLD/LAB and the laboratory.
Quality Control Program	Title 17 describes the specific requirements for a quality control (QC) program in forensic alcohol analysis including: characteristics of the QC sample, procedures for setting the true value and acceptable limits, required response to results outside acceptable limits (method regarded in error), and personnel taking corrective action. All instruments used for alcohol analysis must be kept in good working order and routinely checked for accuracy and precision.	Laboratories are required to have written procedures for quality control and to identify personnel responsible for quality control, but there are no requirements specific to forensic alcohol analysis.

[1] From Title 17, California Code of Regulations, Sections 1215 – 1222.2.
[2] From American Society of Crime Laboratory Directors, Laboratory Accreditation Board Manual, 2003 Version (w/ 2005 updates). Requirements for forensic alcohol analysis taken from the toxicology discipline.